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Application Number	10/729 971
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Filing Date	9 December 2003
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First Named Inventor	LIU Yan-Fei
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Art Unit

Examiner Name

Attorney Docket Number	14545
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Sheet 1

of 2

U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

Examiner
Signature

A. Berland

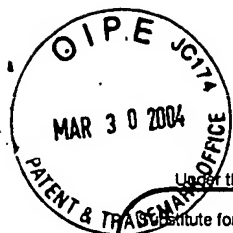
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PTO/SB/08B (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete If Known	
		Application Number	10/729,971
		Filing Date	9 December 2003
		First Named Inventor	LIU, Yan-Fei
		Art Unit	
		Examiner Name	
Sheet 2	of 2	Attorney Docket Number	14545

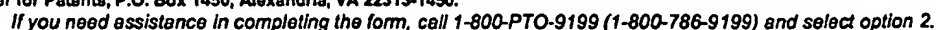
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
AB		PENG XU, FRED C LEE, JIA WEI; The Coupled-Buck Converter for 12V VRM ...; VTIP Disclosure No.: 01-002; Virginia Tech Intellectual Properties, Inc.; Blacksburg, Virginia	
AB		ALBERT M. WU, SETH R. SANDERS; An Active Clamp Circuit for Voltage Regulation Module ...; IEEE Transactions On Power Electronics, Vol. 16 No. 5 September 2001 pp. 623-634	
AB		YURI PANOV, MILAN M. JOVANOVIC; Design Considerations for 12-V/1.5V, 50A Voltage Regulator ...; IEEE Transactions On Power Electronics, Vol. 16 No. 6 November 2001 pp. 776-783	
AB		INTEL; VRM 9.1 DC-DC Converter Design Guidelines; Intel Corporation; Order Number 298646-001; January 2002	
AB		INTEL; VRM 9.0 DC-DC Converter Design Guidelines; Intel Corporation; Order Number 249205-004; April 2002	
AB		R.L. STEIGERWALD, "High frequency resonant transistor DC-DC converters", IEEE Transactions on Industrial Electronics, Vol. 31, pp. 181-191, May 1984	
AB		F.S. TSAI, P. MATERU, and F.C. LEE, "Constant-frequency, clamped-mode resonant converters", IEEE Transactions on Power Electronics, Vol. 3, No. 4, pp. 460-473, Oct. 1988	
AB		Y.F. Liu, P.C. Sen, "Source reactance lossless switch ..", IEEE Transactions on Circuits and Systems - I, Fundamental Theory and Applications, Vol. 43, No.4, pp. 301-312, 4/96	

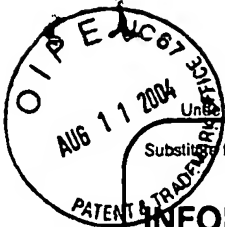
Examiner Signature	A. Behane	Date Considered	01/05
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet 2 of 2

Application Number	10/729,971
Filing Date	9 December 2003
First Named Inventor	LIU, Yan-Fei
Art Unit	2838
Examiner Name	Not yet assigned
Attorney Docket Number	14545

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
AB		JIA WEI ET AL; "A High Efficiency Topology for 12V VRM - Push-Pull Buck and Its Integrated Magnetics Implementations", APEC '02 2003-03-10, pp. 679-685, Vol. 2, IEEE: NY, USA.	
AB		PENG XU ET AL: "Investigation of Candidate Topologies for 12V VRM", APEC '02, 2003-03-10, pp. 686-692, Vol.2, IEEE: NY, USA.	

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